CLAIMS:

1.   A method comprising:

generating gray elements and a dithered gray background for display on a display device, the dithered gray background representing a gray level of approximately 25 to 40%; and

estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background.

2.   The method of claim 1, wherein the dithered gray background represents a gray level of approximately 33%.

3.   The method of claim 1, wherein the gray elements include green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background.

4.   The method of claim 1, further comprising characterizing the colorimetric response of the display device based on the estimated gamma.

5.   The method of claim 1, the method further comprising:

modifying a color image based on the estimated gamma; and

delivering the modified color image to the display device.

6.   The method of claim 1, wherein the display device is associated with a client residing on a computer network, the method further comprising:

transmitting information representing the estimated gamma to a remote server on the network;

modifying the color image at the remote server based on the information; and

delivering the modified color image to the client via the computer network for display on the display device.

7.   The method of claim 1, wherein estimating the gamma includes:

selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background;

estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements;

selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the first plurality of gray elements; and

estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma.

8.   The method of claim 7, wherein the first plurality of gray elements represent greater gradations in gray intensity that the second plurality of gray elements.

9.   The method of claim 1, wherein the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising:

selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and

estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.
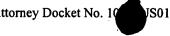
10.   The method of claim 9, wherein the red-blue shifted elements represent shifts in red, blue, or a combination of red and blue away from the color value of the selected green element.

11.   The method of claim 9, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element.

5   12.   The method of claim 1, further comprising:

estimating both the blackpoint and the gray balance of the display device; and

characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance.

10   13.   The method of claim 12, wherein the display device is associated with a client residing on a computer network, the method further comprising:

transmitting information representing the estimated blackpoint, gamma, and gray balance to a remote server on the network;

modifying the color image at the remote server based on the information; and

15   delivering the modified color image to the client via the computer network for display on the display device.

14.   The method of claim 1, wherein the display device is associated with a client on a computer network, the method further comprising guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional

20   web pages to the client.

15.   A system comprising:

a web server residing on a computer network, the web server transmitting web

25   pages to remote clients residing on the computer network;

a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients;

a color profile server residing on the computer network, the color profile server

30   guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients,

wherein the information includes a gamma for the display device, the gamma being determined by selecting one of a plurality of gray elements displayed by the display device that appears to most closely blend with a dithered gray background that represents a gray level of approximately 25 to 40%; and

5   one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device.

16.   The system of claim 15, wherein the color image server stores the

10   information to the client in a web cookie, the client transmits the web cookie from the client to the server, and the color image server modifies the color image via the server based on the contents of the web cookie.

17.   The system of claim 5, wherein the dithered gray background represents

15   a gray level of approximately 33%.

18.   The system of claim 15, wherein the gray elements include green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background.

20   19.   The system of claim 18, wherein the color profiling process includes:

           selecting one of the selected green element and the plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the dithered green background displayed by the display device; and

25   estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

20.   The system of claim 19, wherein the red-blue shifted elements represent shifts in red, blue, or a combination of red and blue away from the color value of the
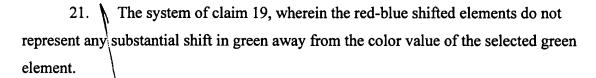
30   selected green element.

21.　The system of claim 19, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element.

5　　22.　The system of claim 18, wherein estimating the gamma includes:

selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background;

estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements;

10　　selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and

estimating a fine gamma for the display device based on the selected one of the

15　second plurality of green elements, wherein the estimated fine gamma is the estimated gamma.

23.　The system of claim 22, wherein the first plurality of green elements represent greater gradations in green intensity that the second plurality of green

20　elements.

24.　The system of claim 15, wherein the color profiling process includes:

estimating both the blackpoint and the gray balance of the display device; and

characterizing the colorimetric response of the display device based on the

25　estimated gamma, blackpoint, and gray balance.

25.　A computer-readable medium containing instructions that cause a programmable processor to:

display a plurality of gray elements on a display device against a dithered gray

30　background representing a gray level of approximately 25 to 40%;

select one the gray elements that appears to most closely blend with a dithered gray background; and

estimate a gamma for the display device based on the selected gray element.

5   26.   The computer-readable medium of claim 25, wherein the dithered gray background represents a gray level of approximately 33%.

27.   The computer-readable medium of claim 25, wherein the gray elements include green elements representing a range of gray levels for the green channel, and

10   the dithered gray background is a dithered green background.

28.   The computer-readable medium of claim 25, wherein the instructions cause the processor to characterize the colorimetric response of the display device based on the estimated gamma.

15   29.   The computer-readable medium of claim 25, wherein the instructions cause the processor to:

modify a color image based on the estimated gamma; and

deliver the modified color image to the display device.

20   30.   The computer-readable medium of claim 25, wherein the display device is associated with a client residing on a computer network, and wherein the instructions cause the processor to:

transmit information representing the estimated gamma to a remote server on the

25   network;

modify the color image at the remote server based on the information; and

deliver the modified color image to the client via the computer network for display on the display device.

30   31.   The computer-readable medium of claim 25, wherein the instructions cause the processor to estimate the gamma by:

selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background;

estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements;

selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the first plurality of gray elements; and

estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma.

32. The computer-readable medium of claim 31, wherein the first plurality of gray elements represent greater gradations in gray intensity that the second plurality of gray elements.

33. The computer-readable medium of claim 25, wherein the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the instructions causing the processor to:

select one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and

estimate the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

34. The computer-readable medium of claim 33, wherein the red-blue shifted elements represent shifts in red, blue, or a combination of red and blue away from the color value of the selected green element.

35. The computer-readable medium of claim 33, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element.

~~36~~ 38. The computer-readable medium of claim 25, wherein the instructions cause the processor to:

estimate both the blackpoint and the gray balance of the display device; and

characterize the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance.

~~37~~ 39. The computer-readable medium of claim 36, wherein the display device is associated with a client residing on a computer network, and the instructions cause the processor to

transmit information representing the estimated blackpoint, gamma, and gray balance to a remote server on the network;

modify the color image at the remote server based on the information; and

deliver the modified color image to the client via the computer network for display on the display device.

~~38~~ 39. The computer-readable medium of claim 25, wherein the display device is associated with a client on a computer network, and the instructions cause the processor to guide the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client.

~~39~~ 40. The computer-readable medium of claim 25, wherein the instructions are contained both in physical data storage media and signals transmitted between the client and other resources on the computer network.